

# Prevention of Suicide

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WITHIN THE PAST YEAR two papers on the problem of suicide<sup>1, 4</sup> have been presented before the California Medical Association. Despite this sign of the medical profession's interest in this gravely important problem, overwhelming evidence indicates that neither physicians nor lay persons realize that in the United States suicide is ninth among the causes of death, according to one classification. In many areas it exceeds tuberculosis, the eighth cause. In certain sections it is fourth or fifth among the causes of death of persons 55 to 69 years of age.

The suicide rate in California is about 50 per cent above the national average, which according to Bauer<sup>1</sup> is 11.4 per 100,000 population. The average over our nation is a suicide every half-hour. In 1949, in California, 1,738 persons died of suicide—more than died of each of three types of cancer, of chronic rheumatic heart disease, of diseases of early infancy or of pneumonia. The incidence of suicide in the state was 18.1 per 100,000 persons. In Los Angeles it was 16.5, in San Francisco 28.0 and in Alameda County 17.3 per 100,000. In Alameda County in 1948 the 157 deaths from suicide, about one every two days, exceeded the 139 deaths from traffic accidents. In California in 1951 there were 1,815 certified suicidal deaths, about five a day.

In 1952 the emergency department of Herrick Memorial Hospital, Berkeley, treated for suicidal attempts 80 persons, of whom six died. In Oakland, Highland Hospital admitted 211 persons, 73 men and 138 women, because of suicidal attempt. For 156 it was the first attempt, but 55 had been two to five times previously admitted for this reason. Of these, 159 persons were sent back home, 40 were hospitalized, eight were sent to jail and four died. The number who received definitive psychiatric treatment cannot be determined. These figures probably are representative of the usual management in California county hospitals of patients who have attempted suicide.

These national and regional statistics do not represent the whole problem. Automobile accidents include a number of suicides or suicidal attempts. Families succeed in hiding a number of genuine suicides. It is estimated that self-destructive impulses or accident proneness are factors in about

• *Suicide is the ninth major cause of death in the nation. California, according to the latest comprehensive figures (1949), ranks about 50 per cent above the national average. Yet the importance of suicide as a cause of death is gravely underestimated. At hospitals and other agencies only emergency treatment is given before discharge of persons who attempt suicide, although it is known that many will repeat the attempt. Rarely is psychiatric evaluation carried out or definitive treatment prescribed. Suicidal symptoms are often ignored in other cases.*

*Physicians have a responsibility, as in any disorder, to recognize signs and symptoms of impending suicide and to use all means of prevention.*

*Prevention could be forwarded by the education of physicians and laymen in detecting early signs of depression, in recognizing accident proneness, and in insisting upon legal control of use of barbiturates, a common means of suicide. Lay associations should encourage individuals with suicidal impulses to go to psychiatric clinics for help. Police should learn how to deal with suicidal attempts, and hospitals should include psychiatric examination and advice as to treatment of all such persons. Suicidal attempts should be registered and reported to public health officers in the same way as are other dangerous diseases. More research should be done on case records of these patients, in order to better understand motivations and means of prevention.*

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half of all nonfatal accidents. "Chronic" or "partial" suicide can be seen in a large proportion of alcoholics and those with psychoneurotic invalid reactions. Many suicidal attempts are never recorded in vital statistics. In many of the cases in which death occurs weeks or months after suicidal attempt the death is not recorded as suicide. In addition, about a fifth or a sixth of persons who kill themselves or attempt to do so, tried to kill or succeeded in killing from one to four or five other persons beforehand.

Complete figures would thus show perhaps as many as 50,000 suicides a year in the United States.

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In addition there are about five attempts for each completed act—a large area for preventive work.

#### THE PHYSICIAN'S RESPONSIBILITY

Unfortunately, most patients admitted to hospitals after suicidal attempts are treated symptomatically. Stomachs are washed or emergency surgical treatment given, and the patients then dismissed—to repeat the act again in many cases. Rarely is psychiatric evaluation carried out and definitive treatment prescribed. Newspaper accounts often state that the patient had been in ill health or despondent over illness and had threatened suicide.

The main problem is the failure on the part of many physicians to recognize in their daily practice signs and symptoms of impending suicide. Psychiatrists are greatly concerned with this problem, but many nonpsychiatric practitioners seem to have very much less concern. There is a tendency to feel that a person should be allowed to die if he wishes.

Sometimes a physician, by failing to understand him, inadvertently increases a patient's latent wish to die. Arguing, cajoling or jollying him may only increase his despair, and make him feel the futility of life all the more. Equally bad is the idea that the patient does not mean his suicidal thoughts. Every suicidal threat should be considered seriously. If tactful discussions serve to establish definitive rapport, in a case of psychoneurotic, hysterical or reactive type of depression of benign form, the physician may be justified in treating the patient by psychotherapy as a calculated risk. The patient must begin to feel some hope for working out with the doctor's help a solution to his problem. If, however, rapport is not established, the physician should refuse to accept further responsibility unless the family will accept advice to place the patient in protective environment—that is, psychiatric hospitalization.

The physician's responsibility thus comes down to the basic problem: diagnosis—usually evaluation of the depth of the depression and the degree of suicidal hazard present. Such a problem should never be lightly dismissed by sending the patient on a trip or vacation. The first responsibility is to establish the patient's degree of insight and his cooperativeness under treatment; the second responsibility is to educate relatives, who are often prejudiced, and get them to back up a treatment program—not always an easy task.

#### DIAGNOSIS

In diagnosis the Number One question is whether a suicidal attempt is always a symptom of mental illness. Certainly the impulse is not a normal reaction to life. One who tries to kill himself is always

suffering from some psychic or undue emotional reaction to his life problems. Normally adjusted persons do not attempt suicide, although probably almost everyone has at some time thought of suicide more or less seriously. Even persons who have strong impulses toward suicide may later become happy and useful after the impulse passes.

Another frequent mistake is to yield to the temptation to prescribe barbiturates for insomnia. Suicide from overdoses of barbiturates is increasing. There is also the danger of addiction. In some persons the use of barbiturates reduces inhibition and thus increases the suicidal risks; in others it may make the person confused, so that he takes an accidental overdose. Physicians may inadvertently increase the hazard by prescribing too large an amount. Again, some patients will deliberately obtain an oversupply by canvassing various physicians. About 20 per cent of suicidal attempts are by barbiturates.

The basic problem is, then, the diagnosis of depression. About half of all suicidal attempts are carried out by patients with psychoneurotic depression and a few by patients with organic syndromes. The rest of the attempts are by psychotic persons. About 70 per cent of psychotic depressions are of the true manic depressive types, in which suicide is a constant problem and attempts occur in 15 to 20 per cent; the other 30 per cent are of involutional and schizophrenic types. In all such cases the patients need strict psychiatric hospitalization care and can be expected to recover under present-day methods of treatment. The two classes of patients therefore include the potential suicides who have never made an attempt and the patients who repeatedly threaten suicide or have made an actual attempt. In the former group, as previously stated, it is a question of evaluating a true depressive reaction, since all such patients are potential suicides.

In taking the patient's history, one must note the patient's description of changes within himself. Furthermore, he often complains only of physical symptoms, and the emotional reaction behind it must be unearthed by watching for changes in emotional reactions. To put it another way, in any patient's history a functional complaint that is not backed up by true organic symptoms or findings, should make a physician look for evidence of depression, including the depth and degree of handicap to the individual. In order to make the diagnosis (often missed) one must look for evidence of reduced energy output, changes in the way things appeal to the patient, his change of interest, and a pronounced change in feeling tone. It is important to keep in mind that psychogenesis is not always present. Many cases are spontaneous and of endogenous type, especially in the manic-depressive group. Indeed, about half of such patients have had previous attacks, with spon-

taneous recovery within a few months, even though a supposed chronic organic syndrome was treated.

### *Symptoms of Depression*

1. *Insomnia.* Especially characteristic is early morning awakening. Later on comes an inability to fall asleep. Insomnia is one of the most persistent complaints, about which patients are often very much concerned; and they may blame it for everything. It is caused by depression. Deeply depressed persons have bad thoughts at night. They may get up, pace the floor, smoke. These are highly significant signs of oncoming severe depression.

2. *Anorexia.* With the oncoming depression patients lose appetite and lack interest in food, with subsequent loss of weight. Frequently they seek medical aid for gastrointestinal upset, which may be the first major complaint. Further inquiry brings out statements such as that all foods "taste the same" or "like sawdust." They have pronounced constipation and use laxatives or enemas for a condition owing only to the small residue in the bowel. The patient may claim that he eats enough, but careful investigation will show an inadequate, low calorie intake.

3. *Loss of interest and drive.* The patient's formerly pleasurable interests no longer appeal to him. He will admit his loss of feeling in this regard. A deeper depression gradually engulfs everything, with loss of feeling for family, reading, hobbies or recreation. The patient may just sit and mope. At times family informants can confirm this lack of interest, if the patient covers it up. There is usually loss of libido or sex drive, to a degree of frigidity or impotency depending upon the depth of the depression, and patients greatly concerned over this problem are especially prone to suicide. Patients also feel mental and physical sluggishness and retardation, so that they have to drive themselves to get to work in the morning or even to get up. As a rule, all these symptoms are exaggerated in the mornings and lessen toward evening.

4. *The mood reaction.* Many patients will not admit despondency and, when asked, will say they feel fine. Only further questions can bring out that they feel discouraged or disgusted and blame all their complaints upon some vague physical condition or upon insomnia. Occasionally, in a depressed mood the patient may say that he feels "wretched," or "miserable," or "bad all over," or something like, "I just can't describe to you how bad I feel." It often requires various tactful questions to elicit the true undertone of depression.

The next step is to evaluate by careful inquiry the depth or degree of depression and the patient's feeling or handicap or hopelessness. The physician may ask about a wish to die or, to put it another way, a wish to give up and quit.

### *Type of Depression*

When by these means the presence of a depression is established, benign depression must be differentiated from malignant depression. If no overt attempt at suicide has ever occurred, a type of therapy that can be safely carried out should be selected. If the patient has made definite threats or has already made an attempt, it is much safer to recommend immediate hospitalization and evaluation, including psychiatric consultation.

Something may be learned from the method of suicidal attempts. Some types of persons are purely hysterical and will take large amounts of aspirin, iodine or other nonlethal drugs. Minor self-inflicted injuries, including wrist slashing, are often insincere attempts. When the victim wants more to alter the environment than to alter his finite status in the world he chooses an unreliable, reversible method. The resulting stir may bring the satisfaction that he really sought in thinking, "They'll be sorry." But persons who resort to violent poisons, firearms or throat cutting have malignant depression. Gas and strangulation techniques have a reputation for effectiveness. Very bizarre means of self destruction occur in frankly psychotic patients.

It is important to remember that the most dangerous time for a person with suicidal tendencies is the period when he seems to be recovering from his emotional crisis.

### **PREVENTION**

How are we to prevent suicide? The very fact that the patient has once considered taking his own life suggests an emotional climate fraught with aggressive tendencies. He has already hit upon the device of turning his aggression inward as a solution to some distressing problem. Therefore, any threats and gestures, however insincere, are not to be taken lightly. But if the patient's suicidal pre-occupations are serious, his relatives must be instructed to look out for signs of inertia, lack of interest, self-depreciation and other symptoms of depression or signs of withdrawal, and at the onset of these warning signs to obtain adequate medical attention.

Psychological tests like the Rorschach often help to assay the suicidal potentials. In case of doubt, hospitalization should be recommended as early as possible. If a nonpsychiatric practitioner feels unable to evaluate the problem fully, he should recommend psychiatric consultation and make sure that some responsible family member arranges for it. Patients are usually too indecisive to do so themselves, but the large majority can, through someone's influence, be brought under psychiatric observation. If the patient's behavior is involuntary and he is uncooperative, the family should be advised to file a war-

rant of apprehension at the district attorney's office and to take the patient into custody at the county hospital for evaluation and definitive treatment.

Near the end of hospital treatment of depression great caution must be exercised. Premature removal on the excuse of homesickness is common; the relatives give in to the patient's pleas and take him out too soon. Some patients conceal their real intent and use such pretexts as homesickness in order to get out and accomplish suicide. It is the physician's duty to warn families of this hazard.

#### *Treatment of Depression*

Modern treatment of depression is one of the most gratifying procedures in psychiatry. Treatment varies, depending on the type and the degree of emergency—suicide may have been attempted or threatened—and on the specific kind of depression.

Milder psychoneurotic depressions may be treated by out-patient care through psychotherapy. If the patient does not respond within a reasonable period or if the suicidal hazard increases, he should be hospitalized and given electroshock therapy.

When a suicidal attempt has occurred, emergency treatment requires hospitalization and symptomatic treatment of the injury, this to be followed by definitive psychiatric treatment. Since so many attempts are made with barbiturates, specific therapy for coma must be readily available.

#### *Treatment of Acute Barbiturate Poisoning*

While treatment for barbiturate coma is not completely satisfactory, the following methods, described elsewhere in detail,<sup>3</sup> have been found fairly adequate and at times life-saving.

A large dose may cause a condition that may not respond except to treatment with the artificial kidney, a device which is available in only a few places.

Subconvulsive electrostimulation and intravenous administration of metrazol both counteract the cerebral depressing action of barbiturates and preserve respiratory function. The author often combines the two methods.

Electroshock therapy is a specific preventive of suicide—a life-saving procedure as well as a curative treatment for individual attacks of depression. It must be administered intelligently, with close attention to the individual patient and with careful follow-up treatment by psychotherapy and other adjunctive measures, in order to insure against relapse. Prophylactic shock therapy is also an effective treatment for breaking up recurrent types of depression and possibly for interrupting the manic-depressive cycle. Prefrontal lobotomy is also sometimes indicated, especially for depression of chronic relapsing types.

The following examples illustrate various types of depressions, all suicidal risks, with the results of treatment.

CASE 1.—*Psychoneurotic, reactive depression.* A man 26 years of age had for several months felt fatigued and had lost interest in work and family life. He had had insomnia, loss of appetite and depression. Two weeks before consultation he stopped work, although insisting that he had a good job, loved his family and had no worries about money.

He discussed rather freely the people close to him, except for his wife, and then his face became expressionless, his voice flat and his words curt. He continued to deny having angry feelings toward her, even after the differences of demeanor were pointed out. At the next interview he reported his surprise at finding that he had been angry with his wife—for several months. He traced the following causes. Despite the much better pay and financial security of his present job, he was dissatisfied and wanted to return to driving a milk truck, a job he had held prior to army service and had liked the best of any work. His wife opposed the consequent return to a small town, less pay and poorer living conditions. He thought he had accepted her viewpoint. He now realized his anger and resentment, feelings he had been unable to admit to himself, let alone express, and had kept them "bottled up." As he was able to discuss these problems the symptoms of depression lifted and he returned to work.

Here a simple technique of ventilation and discussion allowed the patient to express his resentment and overcome his depression by softening his over-strict conscience. The technique is to enable the patient to work out his aggression and hostile feelings instead of turning them in on himself and thereby increasing his suicidal drive.

CASE 2.—*Involuntional depression with suicidal desires.* A housewife, aged 47, stated that about two months previously she had suddenly lost her desire to live. Her family physician told her upon consultation that she was getting hysterical and needed hormonal therapy. Estrogenic hormones were given two to three times weekly. After the second injection she felt more restless and after the third she noted more headaches. Upon picking up a knife she had "an awful sensation" and quickly dropped it. When she reported this to the physician he told her to go out for a walk. She was still much afraid, fearing self-harm, and had thoughts of turning on the gas oven. The physician, upon hearing this report, told her to "stick your head in cold water."

The patient then asked her mother-in-law to take her away. She discontinued the hormonal injections and felt somewhat better. The family physician finally referred her to an internist for further medical treatment, and he in turn referred her for psychiatric treatment when she told him her fears about insanity.

This patient, with a typical case of involuntional depression, very frankly reported to her physician her suicidal ideation. The hormonal treatment prescribed was, for this disorder, valueless.<sup>2</sup> The patient might very readily have carried out actual suicide

during the two-month interval before she was referred for psychiatric treatment.

**CASE 3.**—*Involuntional depression with barbitol coma.* A 53-year-old male business manager of a newspaper, in barbiturate coma, was hospitalized. Reflexes were absent and the blood pressure was 95/60 mm. of mercury, respirations shallow and the pulse thready. After two hours of treatment, consisting of gastric lavage and subconvulsive electrostimulation, the patient began to regain consciousness and was transferred to the psychiatric department. A day later he was still confused, but stated, "I felt that was the best way out. I am worth a lot dead; alive I am a burden on my wife. I had a good job until a few months ago. Then it all went up in smoke."

From the wife it was learned that for about four years the patient had progressively become more depressed. During the past year, under medical care he had taken barbiturates and Dexedrine.<sup>®</sup> For the preceding month he had talked of suicide. The night of the attempt he was cheerful with his wife before going to bed. She noticed his snoring was strange and called an ambulance when she could not awaken him. The patient, who had been let out of a responsible executive position because of a change in management, was unable to find satisfactory work and had quit several fair positions. He was getting deeply involved financially. Two days before the attempt he told his wife that his insurance would provide for her "if something happened" to him.

Psychiatric evaluation indicated a fairly typical involuntional depression with ideas of self condemnation and hypochondriasis. Emergency treatment had averted a serious suicidal attempt. The patient was hospitalized 30 days and given eight electroshock treatments. After treatment he was mildly euphoric for a few weeks. Thereafter he was observed from time to time in office interviews. He took over the management of a newspaper and gradually straightened out his financial problems. He maintained emotional stability and 18 months later showed no signs of relapse.

This case illustrates a rather typical involuntional depression, with signs that could have been recognized much earlier. Proper treatment could have prevented the complete break and the serious suicidal attempt. It also illustrates the excellent result obtained by emergency life-saving treatment of barbiturate coma and also the favorable response to electroshock treatment in this type of depression.

**CASE 4.**—*Manic-depressive disorders.* A woman 33 years of age, brought in by the police with lacerations of wrists and neck, was exsanguinated and in shock. The patient, ill for four years, had alternated between depressive dependence and overactive, aggressive independence, and had been three times in psychiatric hospitals after previous suicidal threats. A divorce suit by the husband and a spontaneous abortion precipitated the present attempt.

After surgical repair of the lacerations and blood

transfusions, the patient was transferred to the psychiatric department. Her mental status typified a severe depression with paranoid projection against her husband. According to previous psychiatric diagnoses, the illness was considered a psychoneurosis, mixed type with anxiety and depressive features, of psychogenic origin—a conflict between her hostile and aggressive demands on people close to her and her need to measure up to her own high standards. Previous treatment had consisted of psychotherapy.

On the basis of the cyclic recurrences of elated and depressive mood swings, a diagnosis of manic depressive psychosis was made. The patient was hospitalized 49 days and nine electroshock treatments were given, followed by supportive psychotherapy for a year. During this time the divorce action was completed. The patient became mildly euphoric and overactive, but obtained a good position as department head in a bookstore. She became more stable after separation from her husband, and some months later obtained custody of her only child. To date she has had no complete psychotic break.

This case illustrates the fairly satisfactory management of a manic depressive state and a serious attempt at suicide. The ultimate outcome is uncertain because of the cyclic nature of the patient's illness.

#### RECOMMENDED PROGRAM FOR PREVENTION OF SUICIDE

Following is an outline of a program that would help reduce the number of suicides:

1. Education of physicians and laity on ways and means of preventing suicide, especially early detection of depression; the relationship to accident proneness; and legal restraints upon use of barbiturates.
2. Establishment of lay associations devoted to prevention of suicide through education about danger signals and motives for suicide; and through encouragement of individuals with suicidal impulses to come for help to psychiatric clinics.
3. Education of police in how to deal with suicidal attempts.
4. Education of hospital administrators on their responsibility to include adequate, complete psychiatric treatment of all persons brought into hospital emergency departments on account of attempted suicide.
5. Research on case records in order to increase understanding of motives and therefore of means of prevention; also complete studies of the presuicidal type of personality, in the effort to spot potential suicides.
6. Education of nonpsychiatric practitioners into how to recognize psychotic depressions and how to obtain family cooperation in getting the patient

under psychiatric treatment, with notification of police in cases in which the patient is uncooperative.

7. Registration of suicidal attempts, with report of all suicidal attempts to public health officers, in the same way that reportable diseases are required, with follow-ups by public health nurses in order to insure that the patient is receiving adequate psychiatric care.

A logical source of help is to be found in life insurance and accident insurance companies. Although life insurance companies realize the extent of the problem of suicide and keep accurate statistics upon the incidence of deaths by suicide, they have not been helpful in a preventive program. They must know that many cases are covered up or called accidents in order to collect insurance money. These companies contribute money for research in various diseases, especially cardiac, in the effort to prolong life, but so far they have shown little interest

in the very practical problem of prevention of suicides. A contribution of money for psychiatric research and also for help on an educational program would be a very constructive step in launching a nationwide preventive program. Most health insurance policies exclude from benefits all hospital or medical costs resulting from attempted suicide.

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